Message of President Robert R. McCormick

1907

Sanitary District of Chicago

MESSAGE

OF

PRESIDENT ROBERT R. McCORMICK

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President's Annual Message.

CHICAGO, December 31, 1907.

To the Honorable, the Board of Trustees of the Sanitary District of Chicago.

GENTLEMEN—In accordance with custom of long standing, I herewith transmit the annual message of the President of the Board, reviewing the work of the past year and making recommendations for future action.

Our activities covered a broad and varied ground. They included construction on a larger scale than any in America, excepting the Panama Canal, the installation of an enormous electric plant, the construction of complicated bridges; they involved the preparation for future work, from the laying out of plans on a grand scale, to the preparation of minute specifications; they involved the study of many pending law suits and the avoidance of several prospective ones.

Not less important, and indeed more exhausting than any of these, were the many negotiations with other governing bodies. Of these the Sanitary District of Chicago, because of its status, unique in municipal history, has had many which have been brought into vigorous issue during the past year. Organized apparently as a municipal corporation for the construction of a canal, it has found its existence threatened by the city which it was formed to preserve—by other cities whose great benefactor it has been—by the state which created it—by the State of Missouri—by the national government of the United States, and even in a measure, by the Kingdom of Great Britain. Many of these issues have come and gone, and it is only those which were settled in the past year and which are still before your Board, to which I will refer.

CALUMET CHANNEL.

Beginning first with the controversy between the Sanitary District and a branch of the Federal Government, in relation to the Calumet cut-off, I will make a concise statement of the situation: The Legislature of 1903 passed the so-called Annexation Act, which provided for the annexation of territories on the north as far as the northern limits of Cook County, and to the south as far as Phoenix, and pro-

vided that the Sanitary District should thereupon construct canals to drain the added territories and that these canals should be built to carry the same proportion of diluting water as does the main Drainage Canal.

This act was framed to prevent the pollution of the waters of Lake Michigan by the sewage of the north shore and Calumet river. The expert commissions of 1887 and 1897 suggested generally the plans adopted in the acts of 1903, but the plan adopted in the act of 1903 owes its existence not so much to the designs of men as to the misdesigns of men. For the engineers who laid out the main channel erred in their calculations and built a canal the southern half of which was of greater capacity than they had estimated and of greater capacity than the rest of the channel. Taking advantage of this situation, the framers of the law of 1903 planned that the Calumet District should be drained by a canal running from the Calumet river into the southern end of the Drainage Canal. The bill was passed by the Legislature, and received the approval of the Governor. Under the terms of this law, it becomes the duty of the Trustees of the Sanitary District to build drainage canals in the north shore and south shore territories. Furthermore, under the law there is given no authority to the Trustees to drain the added territories by any other means than by canal.

A general design for the two canals had been made prior to the election of 1905. Soon after that election, at which seven of the present Trustees were elected, a body of men known as the International Waterways Commission, made a report to the governments of Canada and the United States upon means to be adopted for the preservation of the beauty of Niagara Falls. This commission reported that a flow of 30,000 cubic feet of water a second should be allowed to certain water power companies for their profit and 10,000 cubic feet a second allowed to the City of Chicago for the preservation of its health.

In preparing this report, the commission made Buffalo and Montreal its headquarters and never came to Chicago, nor gave any attention to the plans adopted by the Illinois Legislature for the health of this state.

Upon hearing of the decision of this commission, the Chief Engineer of the Sanitary District, by authority of the Board of Trustees, sent to General Ernst the following letter:

"CHICAGO, March 27, 1906.

Col. O. H. Ernst, Member International Waterways Commission, Mills Building, Washington, D. C.

MY DEAR COLONEL—I saw a report in one of Saturday's papers to the effect that your Board would recommend that a limit be set for the amount of water to be drawn from Lake Michigan by the Sani-

Power House complete and water running over Bear Trap Dam

tary District and that that limit be made 10,000 cubic feet per second. Such a limit would be a serious matter as affecting the future work of the District, as you know it is the purpose of the Board to reverse the flow of the Calumet river and to bring in from that source about 225,000 cubic feet of water per minute, which seems to be the amount necessary for the dilution of that stream. Has your Board gone so far in this matter that it cannot reverse its findings and raise the limit to 14,000 cubic feet per second? I would like to have some suggestions from you as to what had best be done to meet our prospective needs. Would it do any good for me to come on to Washington in this connection?

Yours very truly,

(Signed) ISHAM RANDOLPH,
Chief Engineer."

to which he received the following reply:

"INTERNATIONAL WATERWAYS COMMISSION.

WASHINGTON, D. C., March 29, 1906.

Isham Randolph, Chief Engineer, Sanitary District of Chicago, Security Building, Chicago, Ill.

MY DEAR SIR—I have your letter of the 27th instant. Yes, the American section of the International Waterways Commission has recommended to Congress that the quantity of water to be taken out through the Chicago Drainage Canal be limited to 10,000 cubic feet per second. I do not think there is any prospect of its reversing itself upon that point. It would be impossible, I suppose, to adjust that quantity between the Calumet and the Chicago rivers so as to meet the necessities of drainage.

Yours very truly,

(Signed) O. H. ERNST,

Colonel Corps of Engineers, Chairman of American Section, International Waterways Commission."

The report of the Commission was presented to Congress and to the Senate for the enactment of laws and of treaties to carry out its recommendation. Your Board sent its President and Chief Engineer to represent to the Congress of the United States the situation in which it would place the drainage plans of Chicago and Illinois, if adopted, and the section with reference to limiting the flow for domestic purposes was stricken from the bill.

The International Waterways Commission, now avowedly hostile to the Calumet project, continued its meetings in Buffalo and Montreal and even made a hurried trip to Chicago, where it held a public hearing, but it did not make a study of local conditions.

In view of the steps taken to cause federal interference with the project of the Calumet canal, and remembering the difficulty with which permission was obtained for opening the Drainage Canal in 1900,

Power House before water was let into channel

it appeared necessary to your Board to have its position with reference to the Federal Government defined. Thereupon it applied to the Secretary of War for a permit to reverse the flow of the Calumet river and asked for an immediate hearing upon the request. The hearing was delayed at the request of General Ernst, made December 12, 1906, in a letter of which the following is an extract:

"I have the honor to state that the most important interests adverse to such diversion will not be ready to be heard at the date named. The important interests referred to are the navigation interests of the Great Lakes system and of the St. Lawrence valley. These interests are made anxious and uneasy by the diversion of large volumes of water from the southerly end of Lake Michigan, but they are not armed with the facts necessary to offer an effective opposition thereto. The International Waterways Commission has been engaged for some time in the collection of all the facts, and will at an early date present them in a report."

The hearing took place in the office of the Secretary of War January 14, 1907. Opposition was voiced by the Lake Carriers' Association, but no reasons were given other than those made by the International Waterways Commission, whose report is a published matter and too bulky to be herein included. After deliberation, the Secretary of War informed your Board that the Chief of Engineers recommended against the permit and that he had no power to overrule the Chief of Engineers' decision.

In the opinion of the Attorney of your Board, the decision of the Chief of Engineers and of the Secretary of War was not binding unless the facts warranted their decision, and the engineers of the Sanitary District were positive that the facts did not. The matter then being one of fact between engineers and of law between lawyers, it became necessary to have it adjudicated in court. The matter was presented to Governor Deneen of Illinois and he was asked to go to Washington with the representatives of the Sanitary District and ask the Secretary of War to institute legal proceedings through which the entire matter might be settled, to the end that the local authorities and people at home might know whether the plan laid down by the Legislature of Illinois could or could not be put into effect.

The Secretary readily consented and the necessary lengthy preparations are now being made. During the summer of 1907, it appeared advisable to your Board to obtain the views of a sanitary expert who had no interest in the controversy and whose opinion might be more unprejudiced than that of the engineers of the Sanitary District. Looking over the field, it became apparent that Mr. Rudolph Hering, C. E. D. Sc., stood preeminent in his profession as a sanitary engineer, and his employment was decided upon, notwithstanding the fact that he had previously been in the employment of the International Water-

ways Commission, and that some estimates of his had been used in its adverse report. Mr. Hering's report is a lengthy document, already published, so I merely quote his conclusions, which are as follows:

"After carefully weighing all the advantages and disadvantages of the two propositions, it is my opinion that the proposed Calumet-Sag Canal is not only the more economical one for disposing of the sewage of the Calumet region, but that it has still other advantages of more or less weight."

The situation then is this, that by Act of the General Assembly, the Calumet District was annexed and upon it imposed the Sanitary District tax, and there was imposed upon the Trustees of the Sanitary District the duty of digging a canal to drain the Calumet territory; that the Secretary of War, acting upon the recommendation of the Chief of Engineers under the commerce clause of the Constitution and of the Act of 1899, on interstate commerce, has refused to allow the Trustees of the Sanitary District of Chicago to build this canal and the question is now about to be submitted to the United States courts for decision. The question is an exceedingly complicated one, involving the most expert knowledge on sanitary and hydraulic matters and of constitutional law. Nor has the situation been helped by a few real estate speculators along the Chicago and Calumet rivers who have walked into the controversy, each desirous that the work be done, not in a way to benefit the general taxpayers, but in a way to create benefit for his private purse. The conduct of these men has been intemperate and immoral in the extreme and can bring no good to any one.

STATE LEGISLATION.

As stated at the beginning of this message, the Sanitary District of Chicago is a municipality organized for a purpose hitherto unknown to municipal law. It is therefore natural that many parts of its charter are imperfect, and some positively bad. In my last message to your Board I recommended several changes in the existing law in order to permit the object of the District to be more economically and speedily obtained. The first, in regard to revenue, is one which will not be understood by any person ignorant of the law of the Sanitary District. Concisely stated, it is that the Sanitary District must do a given amount of work in a given amount of time or a mandamus will issue from the Supreme Court of Illinois ordering the Board to do the work, and ordering a special tax levy for its accomplishment. At the time of my last annual message the revenue law was such that the District could not raise enough money to do the work demanded by the law, and would have to be derelict, until the Supreme Court should order an increased tax levy by mandamus. This situation was an intolerable

one, and your Board asked that its power of issuing bonds and raising taxes be increased in such a way as to enable the Board to do the work demanded of it by law in a systematic and economical way. This law was passed by the Legislature, but up to date your Board has not found it necessary to increase the levy. I strongly recommend the utmost conservatism in this regard. It is desirable to do as much permanent work as possible out of bond issues, so that the burden of expense may be spread over as long a time as possible.

I called your attention to the fact that the law should be amended to allow residents of the Sanitary District to act as jurors in cases within the Sanitary District, where the Sanitary District is a party; to the fact that it was not to the best interests of the District that a limit of $5,000 per annum should be imposed by law upon the salary to be paid the Attorney of the Sanitary District; to the fact that provision should be made for the filling of a vacancy caused by the death, absence or inability to act of the President of the Board, and that the necessity of advertising for sixty days before letting contracts interfered seriously with the efficiency of our work, and that there could be no reason advanced for operating the bridges across the main channel for at least two years. All these matters were corrected in the act approved by the Governor on May 25, 1907. In addition, I called to your attention the fact that the law compelling the District to pay the attorneys' fees of any plaintiff who recovered from the District a judgment for overflowed lands had degenerated into causing people to bring suits not for damaged land, but to get attorneys' fees, as was demonstrated in a recent case. This proposed amendment was defeated in committee by a senator from Will County, on a plea that the poor farmers in his district were unable to bear the cost of attorneys' fees, although it was pointed out to the committee that 90% of the cases in the senator's district were controlled by one great corporation.

WATER POWER.

My recommendation on the subject of enlarging the rights of the Sanitary District to develop water power was conveyed in the two following paragraphs:

"The flow through the Sanitary and Ship Canal has made valuable certain power sites which at one time could have been cheaply acquired by the Trustees, but which, ignored by them, were bought up and are being exploited by men who are glad to reap where they have not sown, who are glad to fill their pockets at the cost of the taxpayers, whose greed for gain is greater than their sense of propriety. The interests of these people and of the people of the Sanitary District are now and will forever be conflicting. It should, therefore, be our unswerving policy to fight them through all the courts until they consent

Excavating deep channel under the Elgin, Joliet & Eastern Ry. Bridge; 23,000 pounds of dynamite were fired and 23,000 tons of rock removed without delaying a single train.

to assume their share of the damages and give up our share of the benefits.

"In order that the District may be enabled to avail itself to the utmost of the vast opportunities offered for the development of water power, made available by the flow through the main channel, the law should be amended by striking out the limitation which requires the location of all its works 'north of the upper basin of the Illinois and Michigan Canal.'"

Since those recommendations were made, much study has been given to this subject by the Trustees of the Sanitary District of Chicago, resulting in the uncovering of startling and atrocious facts, followed by the discovery that a series of carefully thought out and brilliantly executed plans have resulted in depriving the state and the Sanitary District of Chicago of the immense water powers created and owned by them and turning the same all over to a certain body of capitalists. It developed that the same body of men were the actors in all of these acts. The matter was brought to the attention of the Legislature.

In order to act with intelligence in the premises, it was found necessary to investigate the entire history of the water power questions affecting the Sanitary District. Concisely stated, the facts are as follows: The right of way of the Sanitary District was laid out to Brandon's Road in 1896 and operations for the acquirement of the right of way begun. All private property as far as South street was acquired by purchase or condemnation and negotiations were entered into between the Sanitary District and the Canal Commissioners for the purpose of acquiring right of way over the lands of the Illinois and Michigan Canal.

In March, 1898, a contract was drawn up between the two bodies under the terms of which the Illinois and Michigan Canal was to have the same amount of power as it had always had and not have this increased or decreased by the flow through the Drainage Canal. All other power was to be the property of the Sanitary District, which created it.

During the same year the Canal Commissioners revoked their contract and compelled the Sanitary District to build a water power plant at Jackson street, and give all the water power capable of development at that point to the Economy Light & Power Co. Attached to the instrument which required construction of this water power plant was another which set out that the construction was dangerous to life and property. The construction is dangerous to life and property and will be so long as it remains.

The decree also stipulated that the Sanitary District should have all the water power to be developed between Dam No. 1 and South street by furnishing to the Canal Commissioners all the power that would be destroyed on the Channahon level. Soon after this, a certain

Site of the excavation of the deep cut at the Elgin, Joliet & Eastern Ry. Bridge, just after the big flood January 1907—Submerged steam shovel In background

speculator began buying all the property in the right of way of the Sanitary District, which the District itself had not acquired, and, having done so, instituted condemnation proceedings to condemn the public property of the Sanitary District for private use, introducing in court a contract from the Canal Commissioners to flow the property of the Illinois and Michigan Canal between Dam No. 1 and South street, which had been awarded to the Sanitary District under the consent decree. The court held that he could not condemn public property for private use, so the suit was defeated and with it fell the lease from the Canal Commissioners.

The Sanitary District later filed condemnation proceedings to acquire the property in its right of way, which the speculator bought, knowing this fact. The District also opened negotiations with the Canal Commissioners for any rights of flowage on the Illinois and Michigan Canal bank between Dam No. 1 and South street, which were not covered in the consent decree, but although they offered as high as $75,000 for the privilege, it was not granted. The speculator proceeded to acquire property south of the lower end of the Drainage Canal in the vicinity of the Illinois river and to acquire all the rights of the state for hydraulic purposes—rights similar to those at Dam No. 1 and South street—for $2,200.

In 1905, there was introduced in the Senate and caused to be passed in the Legislature a bill empowering the Canal Commissioners to sell, outright, state rights and water power. On March 25, 1907, the Circuit Court of Will County held that the Sanitary District had the right to condemn the property at Brandon's Road, on the Desplaines river, which at this time had been transferred to the Economy Light & Power Co. On February 23, 1907, the Economy Light & Power Co. having decided to build a dam in the vicinity of the Kankakee river, permission was asked from the War Department to erect such a dam. The situation then, last winter, was that the Sanitary District had flowage rights on and was condemning all property south of Jackson street. Property at Jackson street owned by the state has consequently been taken away from the state and Sanitary District and turned over to the Economy Light & Power Co., for water power, as water power rights in the vicinity of the Kankakee river have been taken away from the state and given to the Economy Light & Power Co. An attempt to have the National Government confirm this deal was refused by the Secretary of War.

This information having been gathered, it was forwarded to the Governor of the state for the suggestion of a remedy for existing evils, and afterwards negotiations were taken up with him and the Canal Commissioners to put the plan into effect. The plan was, in a word,

Widening the River near Adams street

to remove the danger of Dam No. 1 by removing that dam, carrying this water level through to Brandon's Road by construction which would be perfectly safe, prevent the floods at Hickory Creek, create three miles of deep waterway and develop a large amount of electric power. Another bill was introduced to get for the State of Illinois all the water power created by the flow through the Drainage Canal south of the southern end of the Drainage Canal. The bills were defeated in Committee of the Whole, and never allowed to come upon the floor of either house.

Just at the time this legislation was presented the Economy Light & Power Co. re-organized to take in all the holdings of individual holders and at the same time the Economy Light & Power Co. came under the control of the Chicago Commonwealth-Edison Co., thus completing the monopoly of electric power in northeastern Illinois, a monopoly based upon special privileges and one which could only be challenged by the water power developed by the Sanitary District. Therefore a double incentive arose for the defeat of these bills: first, because it was feared that the passage of these bills would take the privilege of developing water power away from this company; second, the passage of the Sanitary District bill would put a competitor in the field which might regulate the monopolistic rate now charged. An active lobby, in which there is positive evidence were representatives of the Economy Light & Power Co., opposed these bills.

A great deal of antagonism was raised in the Legislature because of the methods used by the opponents to the bills, which antagonism was expressed by the passage of the Allen-Lantz bill, ordering the Governor to remove all obstructions from the Desplaines and Illinois rivers and to allow no more to be put in, and by the appointment by the House of a committee to investigate the affairs of the Illinois and Michigan Canal.

It is to be hoped that the information which the Sanitary District has been able to present to this committee will lead to its recommending constructive legislation, which will accomplish as much as would the passage of the bills which your Board was instrumental in preparing.

LAW DEPARTMENT.

The high standing to which the Law Department was raised a year ago has been maintained during the past year. The efficiency of this Department is shown, not only by the work it has done, but by the fact that the District has suffered no material defeats in pending litigation. On April 13, 1907, the Department lost its chief, Mr. Lindley, by resignation. Deeply as the loss of Mr. Lindley is to be regretted, it is

Constructing the highest lock in the world

a matter of general satisfaction that there was in the Department a man fully qualified to take up the responsibility of that position. On July 10, 1907, Mr. John C. Williams was elected Attorney for the Board. Following is a short recital of the activities of the Law Department during the past year:

LITIGATION DISPOSED OF.

The following cases have been disposed of during the past year in the manner indicated:

Circuit Court of Cook County.

McMahon & Montgomery Company vs. Sanitary District. Claim for $500,000.00. A judgment was originally entered against the Sanitary District for $179,595.00, which judgment was reversed by the Appellate Court. During this year the claim was settled and the suit dismissed on payment of $75,000.00.

Two cases of Chicago & Illinois Western R. R. Co. vs. Sanitary District, et al., were condemnation suits. The lands involved in these suits were leased to the railway company and the condemnation suits dismissed.

Joseph J. Duffy vs. Sanitary District. A bill filed to enjoin the Sanitary District from paying certain moneys to the Forcite Powder Company. The case was afterwards transferred to the United States Circuit Court and subsequently dismissed.

Three cases of John S. Goodwin, Trustee, vs. Sanitary District. These cases involved claims aggregating $510,000.00; damages claimed by reason of the Sanitary District's wrongfully permitting condemnation suits to stand against the City and Iowa elevator properties for a number of years and by reason of increasing the current in the Chicago river and affecting the docks along said property. These claims were entirely wiped out and the suits dismissed upon the purchase of the Iowa and City elevator properties.

Hill vs. Sanitary District of Chicago. This was a bill to foreclose certain property. The Sanitary District was made a party defendant by reason of a judgment for costs and, the property being insufficient security for the mortgage, the Department did not deem it necessary to give attention to the suit.

William Rohn vs. Sanitary District. This case was tried before Judge Walker and the case taken under advisement; no decision has been rendered.

Circuit Court of Will County.

Two cases of A. S. Alderman vs. Sanitary District. These were actions for damages to crops by reason of overflow. One of these cases was tried and a verdict for $506.25 returned against the District.

The Reservoir above the Power House before the turning in of the water—Showing west wall in the distance

During the pendency of the motion for a new trial, both cases, in which Alderman claimed damages aggregating $10,000.00, were taken up, a settlement was effected and all claims for temporary and permanent damages satisfied in full by the payment of $3,500.00.

American Trust & Savings Bank, trustee, vs. Sanitary District. This was an action for damages to land, prior to its being condemned by the District. The amount claimed was $20,000.00. A settlement was affected and suit dismissed upon payment of $250.00.

William O'Brien vs. Sanitary District. This was an action for $2,000.00 damages occasioned by overflowing plaintiff's lands, and was settled by the payment of $600.00.

Shlensky vs. Wisner. This was an action for $900.00 damages claimed for a breach of an agreement to sell certain scrap iron on the Duffy sections. This suit was afterwards dismissed.

Randkowic vs. Sanitary District. This was a claim for $2,000.00 for personal injuries, which was settled by the Travellers' Insurance Company, and the suit dismissed.

Municipal Court of Chicago.

Sanitary District vs. McGuirl, et al. Judgment was recovered against the defendants for $225.00.

Sanitary District vs. Maxwell Bros. Co. This was a suit for use and occupation of certain property sold by the defendants to the Sanitary District. Upon the recommendation of the Judiciary Committee, the suit was settled upon the payment to the District of $150.00.

Criminal Court of Cook County.

People, ex-rel., vs. Mc Cormick, etc. This was a case wherein the President of the Sanitary District was arrested and charged with violating the "Thistle Law." The suit was dismissed.

Appellate Court, Second District.

Curran and Graff vs. Sanitary District, in the Appellate Court, Second District of Illinois. In this case the plaintiffs were allowed $7,500.00 attorneys' fees by the Circuit Court. The Appellate Court reversed the judgment for attorneys' fees entered by the trial court, and the claim was settled by the payment of $4,000.00.

Supreme Court of Illinois.

Alfred Harlev vs. Sanitary District. This was a claim against the District on account of main channel construction work, amounting to $400,000.00. During this year the Supreme Court affirmed the decisions of the Appellate Court and the Circuit Court of Cook County, finding for the District, so that the claim is now finally cancelled.

Sanitary District of Chicago vs. Chapin. This was a condemnation

The Reservoir above the Power House after turning in the water

suit which was instituted in 1902, but Chapin was not served with process. During the present year Chapin was served with summons and he moved to dismiss the petition. The Circuit Court dismissed the petition and the Supreme Court affirmed the decision.

Ida Freda Moll, Executrix, etc., vs. Sanitary District. A writ of error was sued out to review the action of the Circuit Court in sustaining a demurrer to the declaration. This case was brought to recover interest on the amount of an award in a condemnation suit in Du Page County in 1895 after successful appeal. The amount of the claim was, approximately, $3,000.00. The Appellate Court sustained the position of the District and affirmed the Circuit Court. The Supreme Court affirmed the decision of the Appellate Court except as to one count, which the Court held to be good. The effect of the decision, however, was to find that the District was not liable.

Sanitary District vs. Jane S. Martin, et al. The Supreme Court affirmed the decision of the Appellate Court, and the decree of the Circuit Court of Cook County, finding that Martin, et al., were entitled to $6,500.00, which sum, with interest and costs, was paid and the judgment satisfied.

Sanitary District of Chicago vs. John J. Hanberg, County Collector, etc. The Sanitary District appealed from the decision of the County Court, which held that the property of the District, held for its corporate purposes, was subject to taxation. The Supreme Court reversed the County Court, as a result of which taxes aggregating $42,026.65 were stricken off and cancelled.

Appellate Court, First District.

Joseph Kompare vs. Sanitary District, et al. The Appellate Court affirmed the judgment of the Circuit Court against the District and E. Heldmaier, and the judgment has been paid by Heldmaier in accordance with his agreement with the District.

United States Circuit Court.

Ingersoll-Rand Co. vs. Duffy and Sanitary District. This was an action in attachment. The Sanitary District was served as garnishee. The suit was finally adjusted and the suit dismissed.

PROCEEDINGS IN SUITS NOW PENDING.

Circuit Court of Cook County.

Griffiths & McDermott vs. Sanitary District. Several days spent in court in argument over motion to produce certain papers and records in possession of the District. Additional counts have been filed in the suit and several conferences held with the attorneys for the plaintiffs looking either to the trial or settlement of the suit.

Showing heighth of west wall of Reservoir above surrounding country

Mary Prescott McArthur vs. Sanitary District. A case involving substantially the same questions as those involved in the case of Martin, et al., vs. Sanitary District above referred to. It is now on the trial calendar of Judge Walker.

McArthur Brothers Co. vs. Sanitary District. An action for $100,000.00 damages. Demurrers were argued to the declaration and sustained as to three counts. The case is now at issue.

Two cases—Star & Crescent Milling Co. vs. Sanitary District. In these cases pleadings have been filed and a number of conferences have been held with the plaintiffs and their attorneys and the members of the Judiciary Committee looking towards an adjustment.

Special Assessment No. 7, for the paving of Marshall Boulevard. The Department appeared in these proceedings and protected the interests of the Sanitary District.

City vs. West Chicago Park Commissioners, et al. A bill for an accounting for certain taxes collected by the West Chicago Park Commissioners in excess of the amount to which they were alleged to have been entitled under the Juul law, of which excess the Sanitary District would have been entitled to a small amount. The Sanitary District has entered its appearance and has filed pleadings, so that its interests will be protected.

Chicago Title & Trust Company, trustee, vs. Sanitary District of Chicago. An action for damages caused to building by reason of settling caused by excavation in the construction of the Randolph street bridge. A demurrer to the declaration was filed by the District, and argued before Judge Mack. The demurrer was sustained.

Thomas O. Mills vs. Sanitary District. An action for overflow. A demurrer was filed to the declaration and the demurrer was sustained.

South Side Elevated R. R. Co. vs. Sanitary District and City of Chicago. A bill of interpleader to decide to whom the compensation should be paid for water used out of the Thirty-ninth street conduit. The pleadings have been settled and the money paid into court and the case referred to a master in chancery for the purpose of determining the issues between the City of Chicago and the Sanitary District.

Circuit Court of Will County.

The Sanitary District of Chicago vs. Economy Light & Power Company, et al. A preliminary hearing was had occupying more than three weeks upon the motion of the defendant to dismiss the suit. The court denied the motion to dismiss and held that the Sanitary District was entitled to condemn the property involved. Appearances in court

on several occasions subsequent for the purpose of having the case set for trial were made, and the case set for January 6th, 1908.

Considerable work has been done in the examination of files and records of other cases and in the preparation of cases for trial, and in abstracting records to be used in the trial of such cases as were likely to be called.

NEW SUITS.

The following proceedings in which the Sanitary District is interested have been instituted during the year, in addition to those mentioned above which have been disposed of.

Circuit Court of Cook County.

John McKechney, etc., vs. Sanitary District. This is an action for $500,000.00 on account of contracts for the construction of certain sections of the main channel. A suit for a similar amount was dismissed, on our motion, within the year last past, and this is a revival of the same action.

Manufacturers' Junction Ry. Co. vs. Sanitary District. This is an action for the condemnation of certain property on both sides of the main channel in the vicinity of the plant of the Western Electric Company.

Superior Court of Cook County.

Sanitary District vs. Mary E. Turner, et al. A condemnation proceeding for the purpose of acquiring certain property for the right of way for the North Shore Channel. The case has been set for January 6th, 1908.

Sanitary District vs. C. M. & St. P. Ry. Co. et al. An action to condemn the right to cross the tracks of said railway company with the North Shore Channel.

Sanitary District vs. Chicago & Northwestern Ry. Co. An action to condemn the right to cross the Mayfair division of the right of way of said railway company.

Notices have been served, as a result of which several cases for damages caused by overflow of lands, in Will County, are on the trial calendar for this term. It is quite likely that some of these cases will be tried during the present month.

POLICE DEPARTMENT.

Our little Police Department put in a busy and valuable year. Consisting of less than a dozen men, it covered a beat sixty miles long; it guarded the property of the District, kept order among the workmen at Lockport, drove doubtful characters from the canal and de-

tected those who were polluting the Chicago river and the canal. The following is a summary of the work done and cases handled by the police:

Total number of arrests	185
Total number of convictions	175
Total number of reprimands	47
Total number of cases pending in court	7
Total amount of fines and costs	$1,802.25
Total cubic yards caused to be dredged out	37,192
Total linear feet of dock built by prosecuted parties	7,929
Total convictions for filling and polluting the Chicago river in violation of Sections 1913 and 1004	67
Homicides	3
Assaults and batteries	11
Drunk and disorderly	73
Larceny	5
Receiving stolen property	1
Dumping solids in canal at Lockport	2
Disturbing the peace	2
Vagrancy	2
Dead human bodies removed from the canal	21
Dead horses, cows and dogs removed from the canal	75
Number of people saved from drowning	8

CLERICAL DEPARTMENT.

The Clerical Department is charged with the recording of the Proceedings of the Board of Trustees and of its Committees and with the care of the documents and records of both Board and Committees. This work has grown with the increased activities of the Board of Trustees.

It has been the effort of the Department to more thoroughly systematize the methods of filing and keeping records and documents in order to facilitate prompt access thereto, and various improvements have been worked out, which have been important in the aggregate in effecting considerable saving in the time required in finding any particular document, or tracing any particular action of the Board, or of its Committees.

A current index of the Proceedings of the Board has been kept up to date, as closely as possible, for the convenience of all departments.

More, and more complete, financial statements have been made by the Department to the Board and to its Committees and to the President. These have included monthly reports of all receipts and expen-

ditures for the current month and for the year, to the end of each month; of the financial condition of the District at certain times, necessitated by the various issues of bonds or for special statements to the Legislature and various civic bodies; and full reports showing the condition of uncompleted contracts, the amounts paid out on each, and the estimated amounts required to complete the work, at the close of each month.

Special efforts have been made to keep the books always up to date, in order that there might be no delay in making such reports when called for.

The rule of the Board requiring all vouchers for payments for supplies to show the authority for the purchase, practically a dead letter in the past, has been lived up to, and requisitions have been prepared and presented to the Committee on Finance covering purchases of all supplies for the various departments. For the year 1907, 460 requisitions passed through the Clerical Department and were approved by the Board, or by the President, compared with 210 during 1906, only four in 1905 and none at all in 1904.

For years the rule of the Board making the Clerk the purchasing agent for the District has been ignored and purchases have been made by members of all the other departments. Last year the rule was enforced, which increased the work of the Department as the purchasing agency of the District, 495 orders for supplies having been issued in 1907, compared with 428 orders in 1906. The records of prior years show few written orders for supplies sent out by the Department.

The following table of matters which have been before the Board of Trustees for action in the last four years, illustrates alike the greater activity of the Board and the larger amount of work which has devolved upon the Clerical Department:

	1904	1905	1906	1907
Number of meetings	52	57	55	58
Pages of proceedings	658	763	1045	1112
Reports of committees	117	163	375	355
Orders, ordinances and resolutions	40	40	350	348
Messages and reports of the President	4	20	62	23
Reports and communications from the Clerical Department	13	12	65	45
Reports and communications from the Engineering Department	42	25	33	25
Reports and communications from the Law Department	11	5	19	7
Contracts, leases, agreements, permits, etc.	28	42	57	85

REAL ESTATE DEPARTMENT.

The Real Estate Department has continued its activity during the past year and has made such progress as to assure the development of the dockage along the canal banks. In December, 1905, five years after the canal had been opened, the rental and dockage contracts were at the following rates:

	Per Year
Term leases	$10,245.00
Year to year leases	3,379.05
Month to month leases	.....
Receipts from sale of stone and clay in the spoil bank (12 mos. passed)	.....
Total	$13,624.05

By December, 1906, this had been increased to:

	Per Year
Term leases	$10,245.00
Year to year leases	5,794.30
Month to month leases	10,779.60
Receipts from the sale of stone and clay in the spoil bank (12 mos. passed)	9,386.29
Total	$36,205.19

At the present date the actual income of the District's real estate is as follows:

Term leases	$25,182.60
Year to year leases	1,923.25
Month to month leases	22,840.00
Receipts from sale of stone in the spoil bank (12 months passed)	16,995.48
Total	$66,941.33

Too much credit cannot be given to the head of the Real Estate Department or to the Real Estate Committee and its Chairman. Starting with an idea unknown in the commercial and manufacturing world, it has carried on an aggressive and yet economical campaign of development. No proposition has been too great for its consideration and none too small for its notice. Its work has ranged from the construction of a $5,000,000.00 plant to the privilege of tying up a small boat for $5.00 a month.

Nessen Warehouse at Robey street and the Canal—The Warehouse pays $5,162.50 per year on property that was bought for $60,475.00 and pays the Sanitary District extra for power

There is no activity before the Board of greater importance than that of the development of the resources of the canal. An aggressive policy must be maintained in order to attract tenants; at the same time great caution must be exercised to prevent the granting of privileges which will be regretted in future days. In the development of this Department there must be kept steadily in mind that all leases should be subject to re-valuation clauses and that at each railroad crossing there should be kept free from lease a sufficient strip of dockage for general public use. It must be kept in mind that the canal, from Robey street to Summit, because of its geological structure and of its freedom from vested interests, can be cut into any shape that requirements of commerce may demand. Permanent improvements should not be allowed on either bank of the canal within 100 feet of the dock lines now fixed by ordinance. As time goes on, the maintenance of the canal may grow into an expensive work. Let this expense be borne by those who reap the commercial advantages of it and place in their contract the obligation to maintain the banks of the canal and the depth of the canal to the middle of the stream before lessees' properties, in a condition acceptable to the chief executive officer of the Sanitary District or his successor.

With the purchase of the right of way of the Evanston canal and with the digging of the canal, the scope of the Real Estate Department is greatly increased. At the present time it has on its hands the care of many houses and cottages found in the line of the right of way. These temporary leases, like all temporary leases, should be terminated as soon as practicable. The temporary leases on property to be excavated will take care of themselves. Those on property to be retained permanently should be changed into leases of at least ten years in length, taxes and repairs to be paid by the tenant.

SOUTH BRANCH OF THE CHICAGO RIVER.

Your Board has continued the widening of the South Branch of the Chicago river in the same methodical, businesslike way it adopted two years ago; it has ignored the clamors and political pressure brought by interested parties, and has been fearless in its steady advance. Knowing that to do work economically, it is necessary to do a goodly amount at a time, your Board has refrained from advertising its work until it had acquired the following properties:

From north of Jackson boulevard to Madison street, acquired of the Pennsylvania Company; from the Seipp property south of Van Buren street to the north line of the Union Elevated R. R. Co.'s power house,

Power House after the cloudburst of January 19, 1907—Inclines washed out and frozen in the ice—Steam shovel submerged in the foreground

acquired of Richard L. DeZeng, Clara R. Bacon and Cornelia R. Green; from the north line of Harrison street to the south end of the Charles C. Chapin property, acquired of M. C. McDonald; from Sixteenth street south about 750 feet, acquired from the Western Indiana Belt Railroad.

Several times bids were thrown out for various causes, and when finally the contracts were let, they were let at a rate 10 per cent less than the work had hitherto been done on the river.

On October 2, 1907, your Board bought the Iowa and City elevators, paying therefor $850,000.00 in 4½% two-year bonds. The easy way out would have been to have pushed condemnation proceedings and then left the responsibility to a jury. I am confidently of the opinion that this course would have necessitated the payment of a far larger sum of money than actually was expended.

EXTENSION OF MAIN CHANNEL, WATER POWER DEVELOPMENT.

By far the most important construction work carried on in the past year was the work for the development of water power at Lockport and the extension of the main channel. As outlined in my last message, the contract with Joseph J. Duffy for the construction of retaining walls and excavation for the head-race and tail-race was forfeited by the Sanitary District on June 9, 1906. The reasons for this forfeiture, as set out in the certificate of the Chief Engineer, were that he was not carrying on the work with celerity, that he was not carrying on the work according to specifications, and that he did not have sufficient machinery upon the work. The absolute necessity for this drastic action was clearly shown by subsequent experience. The contractor had gone at his work in an unscientific manner and had dissipated its resources, without getting anything like full value from the work he did. He had allowed his machinery to run down to the breaking point and had exhausted his credit with the banks. It is perfectly clear that had the District delayed taking action it would have had the contract thrown upon its hands within a few months in far worse condition than it was and would have had to finish the work at much greater expense than was actually incurred.

At the time the District took over the work and for months previously, the work to be done was this: Rock from the tail-race was blasted, dug up by steam shovels and dumped into trains of cars; these cars were than run and dumped behind the concrete retaining walls of the head-race, or into the rock crushers to make concrete. There had been a lack of system in the work. The amount of blasted rock would be consumed before other rock was in condition to be blasted; the

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Coffer Dam between old and new Channels

trains would crowd around the steam shovels and half of them be idle while the others were being loaded; and, again, the trains would troop away to the dump, leaving the crushers idle, while frequently there would be heard the whistle from the crushers, signalling that they had no more rock to crush and, consequently, could not supply the concrete mixers. The tracks were not laid with due regard to the trains run upon them and frequently several trains arriving at one switch would block each other and the whole plant would lie idle. This not only delayed the completion of the work, but enormously ran up the cost.

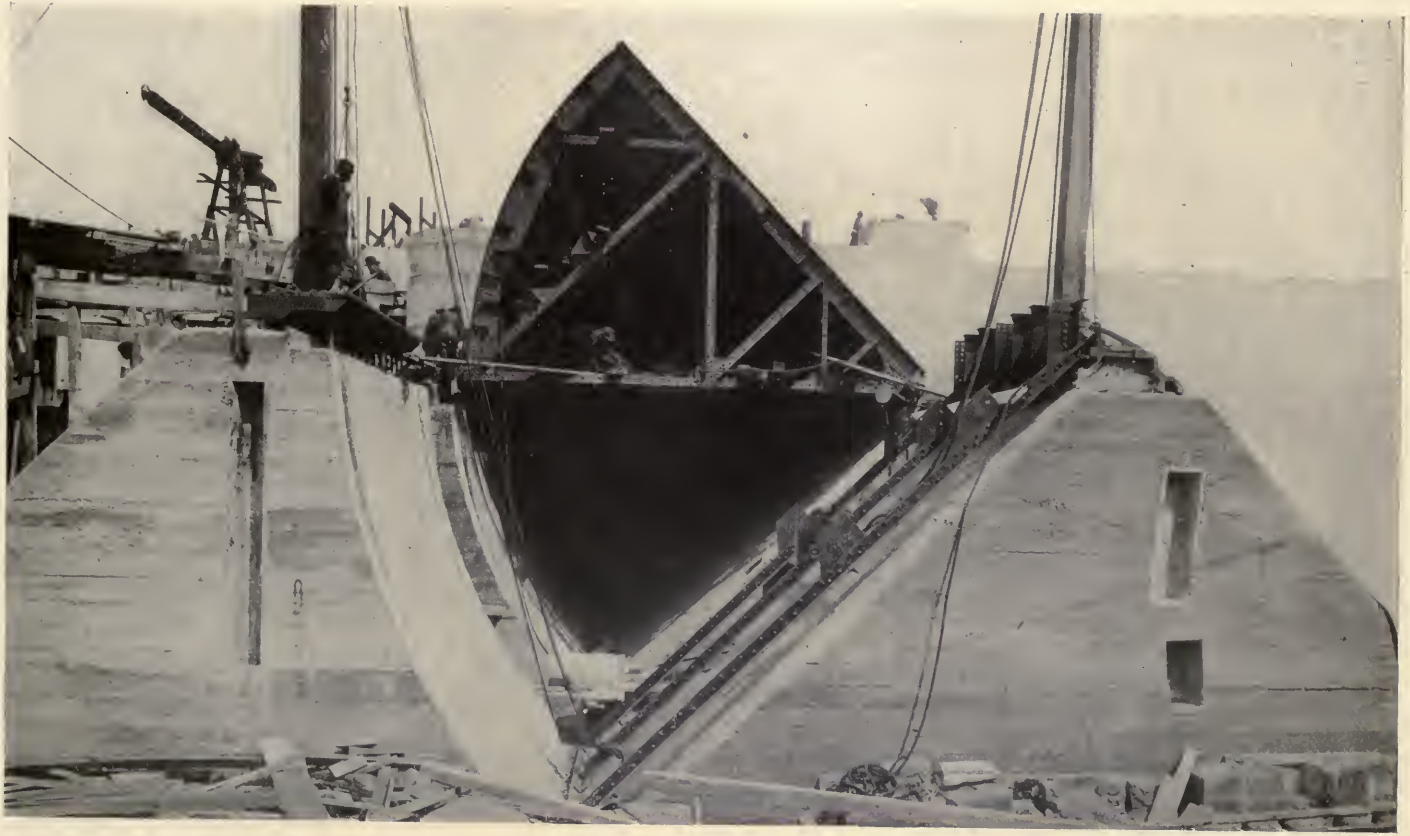
To re-organize the undertaking was no easy task and perfectly satisfactory results were not attained until Assistant Chief Engineer George M. Wisner was put in charge of the construction.

We proceeded at once to re-organize the work. Shovels were placed so as not to interfere with one another; tracks were laid so as to give the utmost freedom of motion to trains and these, in turn, were routed in such a manner as to keep out of each other's way, so that there always could be a train loading at each shovel and always sufficient stone delivered to the crusher. No one who has not seen the work carried on before and after the re-organization can fairly realize the change wrought. Perhaps the greatest indication that can now be given is this: In the months of June to December, 1905, when the machinery was new, when the haul of the excavation was short and every advantage that was possible existed, the contractor excavated 208,000 CUBIC YARDS OF MATERIAL. After the re-organization, in the months of June to December, 1907, having taken over machinery in an almost ruinous condition, doing the work in the most disadvantageous way and with the longest possible hauls for material, there were excavated 240,500 CUBIC YARDS OF MATERIAL.

The employes responded to the new method of management, worked more willingly and efficiently and were bringing the contract rapidly to a close when there occurred a contingency which had long been foreseen, but which could not be guarded against.

On the 19th of January, 1907, a storm of rain amounting almost to a cloudburst fell on northern Illinois. This, melting the snow which was on the ground, poured in a torrent down the Desplaines Valley. The Illinois and Michigan Canal overflowed its banks for miles at a stretch. A torrent of water coming down swept into the unfinished work. Our men worked heroically to protect the levees—some of them working over twenty-four hours—but to no avail. The levees were washed out and the water poured into the deep cut, filling it in the space of a few hours.

Railroad tracks were everywhere washed out and where they were



Erecting Bear Trap Dam

supported on any quantity of wooden supports, floated to the surface of the water, and twisted out of shape. Over 5,000 cubic yards of rubbish was washed into the line of the canal. The steam shovels were too unwieldly to move and were submerged. The dinkey engines were all run on to high land excepting one which, running through a depression to a place of safety, had its firebox drowned and was left in the cut.

To make matters worse, the next day was cold. The wind blew from the north and the thermometer fell below zero. In a moment all moisture was turned to ice and all pools were frozen to the depth of many inches. From that time on until March 10th it was impossible to do any kind of work, and the completing of the undertaking was delayed at least three months.

It may be noted in passing that no act of the Sanitary District or its employes could have averted this flood. On the other hand had the contractor proceeded with anything like the dispatch demanded by his contract, the whole work would have been finished before the flood came.

Work was not attempted until March 30th, 1907, and then a new force was gathered together and the work put under way as before. The work on section 3 was finished on July 31, 1907. The work at the north end would have been finished as soon, or sooner, had it not been stopped to await the completion of the "Butterfly Valve." On August 6, 1907, the water was let into the tail-race from the southern end of the canal. This was done by placing a large charge of dynamite in the coffer-dam separating the tail-race from the completed channel. Several charges of dynamite were needed to open a channel sufficient to flow in water in any quantities, but the water, once started, soon opened its own way and filled the tail-race in six hours.

On the same day it was decided that the butterfly valve was in such condition that the concrete wall separating the old canal from the new excavation could be taken out. Accordingly, on this day, a section sixty feet wide and ten feet deep was blasted out. To facilitate the removal of the concrete end of the old channel, there had been built a coffer-dam of clay and cribbing, which had been difficult of erection and uncertain in behavior. Between this coffer-dam and the butterfly valve a force was put to work blasting the rock and concrete and hauling the same out by the use of derricks. On August 26, 1907, when the intervening wall was almost entirely removed, the engineer in immediate charge thought that the coffer-dam was giving way. Accordingly, the Chief Engineer and the President of the Board proceeded to the spot. Work was continued, until about midnight, when the creaking of the crib and the increased cracks in the clay warned us that it was no longer safe to keep the workmen in the hole. They were ordered out and a

Erecting Butterfly Valve (in foreground)—Concrete mixing tower building retaining wall (in background)

channel was cut through the coffer-dam, filling the new channel as far as the butterfly valve in less than an hour. The butterfly valve still stood between the waters of the Drainage Canal and the new channel. The butterfly valve was opened on August 30, 1907, and the water let into the three mile extension of the waterway and the head-race of the power plant. Under the test of water pressure, considerable water seeped through the concrete walls, as is customary with new concrete work. A month's time closed the walls, as expected, and left those men who had been hired to criticise them before their completion in a position which can bring them no honor.

Soon after the Duffy contract was taken over, Electrical Engineer Ellicott was put in charge of the construction of the power house, lock, butterfly dam and fender walls of the power plant.

Power House.

Work was first started on the power house in 1905, but it was not entirely completed until October of this year. A roof was placed on the building in the early part of this year and the installation of machinery commenced. Under a supplemental contract with the Wellman-Seaver-Morgan Co., only three units were installed, the fourth being held in their factory until such a time as a test can be made for efficiency on the three units now completed. The understanding is that, if the units installed do not reach the efficiency guaranteed, the fourth unit will be rebuilt and the existing units changed and rebuilt one at a time. The water wheels were tested the first time on September 8, and the re-adjustment of bearings, with which there was considerable trouble, was immediately started and completed on the three units on November 21, at which time they had been operated for practically two weeks without shutting down. The plant was officially started and the high tension current placed on the lines November 26, at 2:20 P. M. Three units are ready to be placed in service.

Construction of Lock, Dams and Fender Wall.

The construction of this work was started in March, 1906, and was completed in September of this year. The first boat was sent through the lock on October 2, and was the bearer of a letter to President Roosevelt at Memphis, Tenn. The 12 foot dam was first operated on October 26. This dam will be used for the purpose of clearing ice and other refuse which may get into the forebay and interfere with the operation of the water wheel units. The 48 foot dam was first operated on November 12, and will be used in place of the present bear trap dam at the controlling works, and will regulate the flow of water in

Butterfly Dam—East half of end wall of old channel and mud dam showing water being admitted into the channel August 27, 1907—4 A. M.

the river in conjunction with that used through the water wheel units. Construction of the fender wall, which is used for the purpose of diverting ice and other objectionable floating matter from the racks of the water power forebays, was started in March, 1906 and completed in June.

Transmission Line from Lockport to Chicago.

A part of this work was commenced in the fall of 1906, and consisted of digging holes in the rock section. Work was then stopped because of the non-delivery of towers and was not started again until March of 1907, when the delivery of towers was commenced along the canal. Numerous delays ensued in this work and the construction of the line was not completed until the 10th of November. As above stated, current was turned on this line November 26.

Transmission Line from Distributing Station to Oak Park and Garfield Park.

Work on this line was started early in the summer, and completed the latter part of October, with the exception of a short stretch of the Oak Park branch on which the work has been stopped, pending some further negotiations with the Village of Oak Park. A line was also built from this line into the Town of Cicero. After this line was completed into Garfield Park station, the West Park Board asked us to further extend it by building a line into Douglas Park and Humboldt Park, which we have done.

Transmission Line to Morgan Park.

The work on this line was seriously delayed because of our inability to secure a permit from the City of Chicago, through which a part of this line had to be constructed. This matter was not finally disposed of until October 26. Work was started soon thereafter and the line has been completed. A part of this line has been changed to enable the furnishing of current in the Stock Yards, using Forty-third street for the cross line.

Distributing Station.

The building of the distributing station was started in October of 1906, but was seriously delayed by the inability of the contractor to secure concrete blocks, of which the building is constructed. A roof was not placed on the building until early in April, and the installation of the machinery was immediately started. Owing to a part of the machinery having been in a railroad wreck, in which considerable damage was done, the completion of the electrical equipment has been seriously

Distributing station at Western avenue and the Canal

delayed. We are, however, prepared to deliver 15,000 K. W. from this station, as the apparatus has been entirely completed. The electrical equipment in this station will be added to from time to time to provide for additional customers, requirements for whom cannot at this time be ascertained.

ILLINOIS VALLEY.

Assistant Attorney Walter E. Beebe has given his exclusive time and attention during the past year to investigating the conditions in the Illinois valley. Messrs. B. M. Chiperfield and Frank J. Quinn have attended to the detail work in connection with the cases pending in all counties except Will County; and Mr. P. C. Haley has given his attention to the cases pending in the latter county.

Numerous conferences have been held with the attorneys in each of the valley cases in order that we may be fully prepared when the cases are called for trial. No cases have been tried, outside of Will County, during the present year; but it is quite likely that early during the coming year some of the cases will be pressed. High water conditions in the valley have made it impossible for the Engineering Department to complete its work of preparing the evidence in all of these cases, but considerable data have been gathered; and, in view of the continuance of these cases a year ago for the purpose of affording the Engineering Department an opportunity to complete the work, we do not feel like asking for a further continuance at this time and are expecting to try such cases as the plaintiffs may desire to set down.

The organization of the Illinois Valley Division has not been changed in any degree, though its operations have been seriously impeded by high-water conditions which prevailed during the last twelve months. Living in camps or in house-boats, the men have served faithfully and conducted themselves in a way to gain the friendship, not the hostility, of their neighbors. The result of their surveys have been platted, and the foundations have been laid for a study of Illinois Valley conditions far more complete than any before attempted.

This work is of two-fold value. First, it is absolutely necessary to enable the Trustees to distinguish between those damage claimants who have merit in their cause and those who are merely blackmailers. Second, it is building up a mountain of information which is essential to the deep waterway movement.

NORTH SHORE CHANNEL.

During the past year ordinances have been prepared by the Law Department and submitted to the City Council of Evanston and the Vil-

Illinois Valley Surveying Party

lage Board of Wilmette. After considerable negotiation between the Department, the Committee of the City Council of Evanston and the Committees of your Board, the Evanston City Council passed the ordinance submitted by us; and the Village of Wilmette has recently passed an ordinance which is now before your Board for its acceptance or rejection.

A contract was prepared with the Highway Commissioners of the Township of Niles granting to the District the right to cross certain highways in said township and defining the character and number of bridges to be constructed.

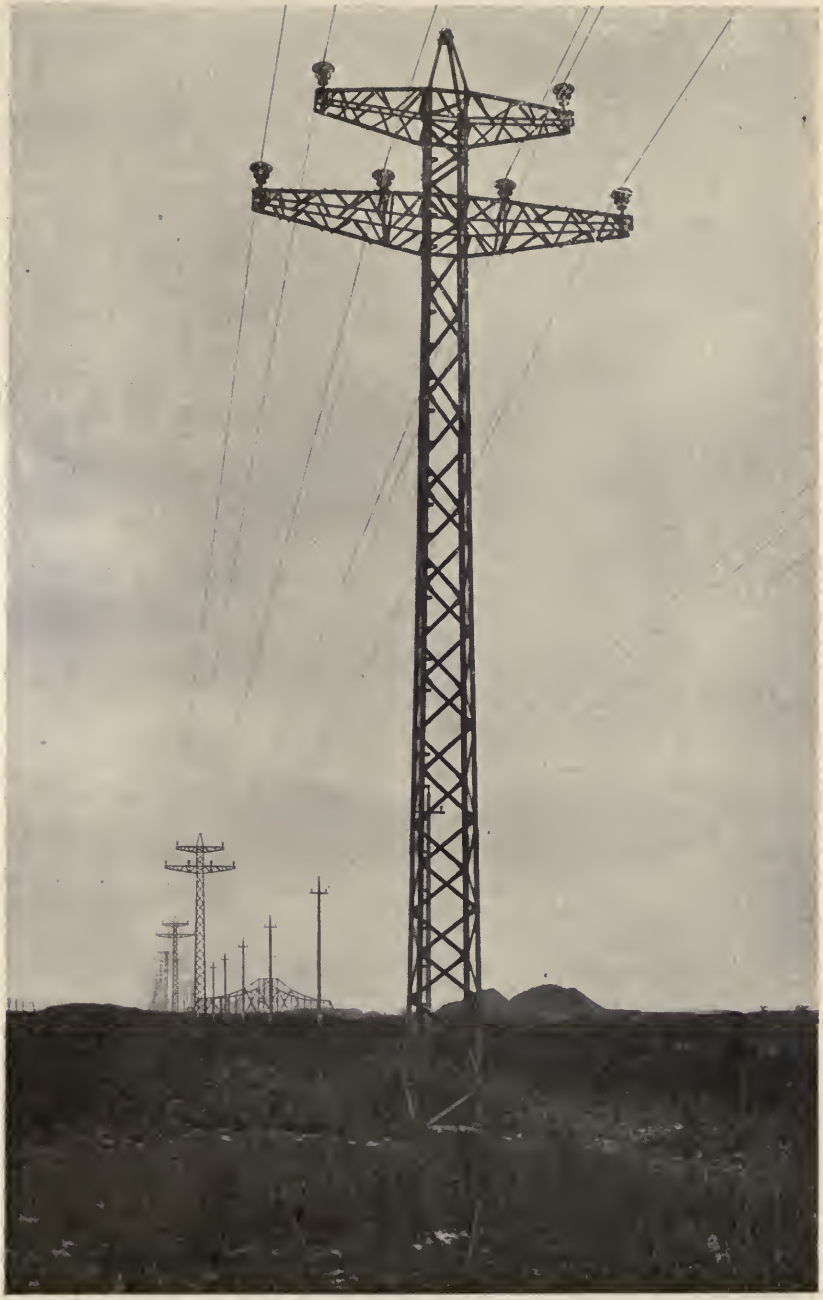
Negotiations are now in progress with the Chicago & Northwestern Ry. Co. looking towards an amicable agreement fixing the terms upon which the Sanitary District will be permitted to construct its North Shore Channel across the rights of way of said company. An offer was made to the Chicago, Milwaukee & St. Paul Ry. Co., which was not accepted, and proceedings to condemn are now pending in connection with the crossing of said company's right of way; as well as the crossing of the Mayfair division of the Chicago & Northwestern Ry. Co., hereinabove referred to.

Wilmette Pumping Station.

The preliminary plans for the Wilmette pumping station have been decided upon and many of the details completed. The specifications are in course of preparation and bids for the work will be asked for within the next thirty days. This will comprise the building, pumps, electric motors for driving the same and the transmission line from the substation to Wilmette. This transmission line is being designed to supply current to several villages on the north shore, with whom negotiations are in progress.

As soon as legislation was secured guaranteeing finances sufficient for digging the Evanston-Wilmette canal the undertaking was attacked aggressively. The property in the right of way was appraised by three competent men and negotiations were begun by the Finance Committee for the purchase of the property. The actual work of negotiation was carried on by the Finance Committee, whose unselfish efforts have brought the most satisfactory results.

In eight months it purchased 38 per cent of the right of way, a showing which is all the more remarkable when it is considered that this necessitated 108 separate transactions, which are about one-half the transactions necessary to purchase the entire property. This showing would have been greatly exceeded had not the financial panic made



44,000 Volt Transmission Line

it advisable temporarily to stop cash payments. In the meantime, the Engineering Department had not been idle. Test pits have been dug at frequent intervals throughout the line of the canal and the quality of sub-soil exposed. At the east end a great test pit one hundred feet square has been dug, in connection with other work, which test pit is of great value to the general work.

According to the terms of the contract with the City of Evanston, all the spoil excavated from the canal east of the Northwestern tracks in that city must be removed. Several plans of removal were studied and it was determined that the best plan would be one whereby the spoil should be dumped in the lake at the mouth of the channel, forming at once a breakwater for the protection of the intake, an area of land thirty acres in extent, which can readily be turned into a park. Studies were made to ascertain how extensive a breakwater would be needed to protect the channel mouth. No useful information could be obtained and it was determined to experiment by running a short jetty into the lake and depositing spoil to the north side of the jetty. This jetty was successfully built in spite of the difficulties encountered from the lack of plant. The result is more creditable from comparison with the work done at Waukegan on the Naval Training Station, where a similar jetty was washed away during construction. The spoil dumped to the north of the District's jetty was from the great test pit located at the mouth of the channel. So, by the same work, three important objects were attained, viz: a test pit of conclusive proportions was dug, a sufficient amount of spoil for experimental purposes was deposited in the lake and a not inconsiderable amount of channel was excavated.

The effect this work has had upon the lake bottom has been different from what one would be led to expect and makes certain one thing, viz: that to lay out a definite plan for a breakwater at this time would be folly.

It is only by feeling our way and being guided by experience gained from day to day that we will be able to construct this breakwater properly and without great loss of money due to the uncertainty as to the form this breakwater must take; it is impossible to draw specifications covering the work and, therefore, it becomes impossible to do this work by contract.

If this work cannot be done by contract, it follows logically that the excavation of the canal east of the Northwestern tracks in Evanston, which excavation must be dumped behind the breakwater, cannot be done by contract. And here it may be said in passing that the complications which are bound to arise in building the canal through a well built city, where sewer and water pipes, gas pipes and electric conduits are laid, and where many bridges must be built, are more than any en

Generators at Power House, Lockport

gineer can provide for. As each unexpected complication will bring an additional charge from the contractor for extra work, it is unquestionably a fact that the extra charges will amount to a greater sum than any advocate of contract work would claim can be saved to the District by the skill of any contractor.

West of the Northwestern tracks the work will be plain excavation with few, if any, complications; work which can be set forth in specifications. I, therefore, recommend that this work be advertised for contract and awarded, if fair bids are received from proper contracting firms.

By unique arrangement, 6¼ per cent of the work is being done without cost of any kind to the District. It so happened that the line of the proposed channel ran through the property of the National Brick Company. Negotiations for the purchase of the right of way in this locality developed into a contract whereby the Sanitary District obtained the right of way required for the canal, excavated by the Brick company to a depth of 16 feet by one mile in length, giving in return a lease on the canal bank when finished, and giving to the brick company all clay soil excavated along half the length of the canal. Inasmuch as this spoil should be removed, the contract is a most fortunate one for the District.

CONTRACT WORK VS. DAY LABOR.

The question whether public work is better done by contract or by day labor is one upon which students of municipal affairs differ. The question is made harder of determination because the advocates of each plan frequently juggle their figures and misrepresent facts. If it should be admitted that contractors can do work better and more economically than can municipalities, there arises the question, *will* the contractors do the work better than the municipalities can? They will not unless they have to do so. Contractors are not free from the failings of the human race and, as there is imposed upon them no responsibility to keep down the cost of public construction, they naturally take as much for their services as they can get. Responsibility for efficient and cheap public work rests upon public officials. In the past, they have tried to accomplish these objects by calling for competitive bids; but combinations, legal and otherwise, control in all public bidding. The only competition that can be brought to bear on contractors is the competition of the municipality itself, and this competition can only be effective when the municipality is equipped to do its own work without the intervention of the contractor. For this reason, I have felt that the

Installing Turbine Wheels in the Power House

Sanitary District of Chicago should equip itself with a plant suitable to the kind of work that is before it.

The District is absolutely without any plant for dredging or work in water. I believe that we should proceed to acquire a complete dredging outfit and am confident that, even if this plant is never used for doing work, the saving in amounts paid to contractors will cover the expense of this plant in a short time.

ELECTRICAL DEPARTMENT.

In the past year the City of Chicago, Town of Cicero and the West Park Board have contracted with the Sanitary District for lighting at the rate of $15.00 per horse-power, a rate highly advantageous to those bodies and one under which the Sanitary District can live. The advantages of this arrangement are so unquestionably great to all the municipalities within the Sanitary District we may expect all of them to ask for electricity for lighting within the next twelve months, even where our most persistent efforts have been unable to elicit any response as yet. Unquestionably all power used within the Sanitary District for municipal purposes should be taken from the power plant of the Sanitary District. It is absurd for the city to go to the expense, and the trouble and encounter all the opportunities of corruption offered in producing power by steam, when there is available a cheaper power already developed by the great canal, which power, when not taken for municipal purposes, must be sold to the public with disadvantage similar to those of producing power by steam.

However, until the municipalities avail themselves of the opportunity herein set forth, there remains in the hands of your Board a valuable asset which must be realized on to its fullest extent. The marketing of electric power on terms equitable to all consumers in a way to bring the greatest possible revenue to the District is complicated in the extreme. However, it must be gone at courageously, with the knowledge that if mistakes are made in the beginning, they can be rectified; but failure to make aggressive effort to do right can have no excuse whatever. The marketing of this power will have the further advantage of bringing to your body in time an accurate knowledge of the electric power industry, which knowledge when furnished to the City Council of Chicago and other municipalities within the District will be of valuable assistance to them in regulating the business of the public service corporations.

In this connection it may be advisable to urge the City Council to take no binding action fixing the rates of the Edison and Commonwealth companies until it may be guided by your experience.

CHEMICAL AND BACTERIOLOGICAL LABORATORY.

The effect of the Drainage Canal upon the waters of Lake Michigan and the Chicago river, also the Desplaines and Illinois rivers, is constantly a matter of discussion. Arguments are supported by scientific works, based upon experience in other parts of the world. Nothing can be more vain than such discussion, so long as it is possible to accurately determine the exact effect of the Drainage Canal by observation. Therefore, there has been formed a chemical and bacteriological laboratory in the new warehouse with a chemist and bacteriologist, whose duty it is to make exhaustive experiments and analyses. By the time I write my next year's message, I expect to incorporate a report from him, which will be not only instructive, but of great practical value.

SALARIES.

The pay of employes of public bodies is generally inequitable, not being properly based upon the services performed. Generally speaking, I believe that the services should be classified with a certain remuneration for each class, and that increases of pay should be made by means of promotion. Of course, employes who have had much experience in one class of work become more valuable than new appointees and cases frequently arise when their pay should be increased, even if corresponding promotion does not come. However, when a person who has thus had his salary increased, is promoted or leaves the service, the new appointee who fills the vacancy should be paid the smaller, not the larger salary.

The efficiency of every department is absolutely dependent upon the efficiency of the heads of departments. The Sanitary District must make its services sufficiently attractive to keep competent department heads. The salaries, therefore, of these department heads must be graded according to the abilities of the men and the responsibility of their positions. During the next three years I expect to recommend to your Honorable Body material increases in the salaries of the department heads.

FINISHING THE WORK.

It must be constantly borne in mind that the Sanitary District of Chicago is not a permanent institution. It was organized to do a specific work and, when that specific work is ended, it should not be continued, to fall into disrepute and disuse, as other similar bodies have done. Upon you devolves the duty of arranging its affairs so that it may most easily be taken over by some other body.

Various plans of ending the District have been suggested. I will

mention but two. First, it is suggested that the Sanitary District be combined with the Illinois and Michigan Canal Commission and that some of the Trustees shall be appointed from without the boundaries of the District. Inasmuch as it is intended that the taxpayers of the Sanitary District shall pay all the taxes, this suggestion becomes preposterous. With a property upon which over fifty millions of dollars have been spent and upon which, in the course of time, fifty million dollars more will be expended, with legal rights which must be scrupulously guarded against the inroads of too aggressive water power companies, and docks which are looked at with greedy eyes, it is essential that the guardians of this wealth must at all times be directly responsible to the owners of the property. To place in charge of this estate men not responsible to its owners would be to invite embezzlement. Let the navigable feature be separated from the sanitary and financial features and let it be turned over to the state or federal authorities. The others must always be held by home people.

The proper solution then seems to be this:

Let the present form of organization complete the original drainage scheme, which includes the draining of the Evanston and Calumet additions, the widening of the Chicago river and the main channel, and the extending of the main channel to its proper terminus at Lake Joliet. From this point on, the state and federal governments should take charge and carry the deep waterway through to the Gulf of Mexico. When all constructions have been completed, there will remain merely the administration of the property and the payment of outstanding bonds. These can be attended to by executive officers to be appointed in some way which the future will determine.

Before that time comes, your Board should have developed a policy in the Electrical and Real Estate departments which will guarantee the utmost progressiveness in increasing the revenues while guarding absolutely against any corruption, inequality of compensation for similar service, or any form of abuse. The proceeds will go to the payment of the outstanding debt and by the time the debt is paid, it is to be expected that Chicago will have extended its boundaries to the limits of the present Sanitary District.

Respectfully submitted,

ROBERT R. MCCORMICK,

President.

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